



NATIONAL WEATHER SERVICE

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION



Special Weather Briefing

NATIONAL WEATHER SERVICE ATLANTA

12 PM Wednesday, December 21, 2022



Disclaimer: The information contained within this briefing is time sensitive which should be taken into account while viewing.

Main Points



- **High Confidence - UNSEASONABLY COLD temperatures will overspread all of north and central GA by Friday morning (12/23)**
 - Temperatures expected to be 20-35F degrees below normal
 - Coldest air in 5-8 years (Jan 2015 / 2018)
 - Strong wind gusts 25-35 mph will result in critically cold wind chill values below zero expected for 24+ hours
 - A Wind Chill WATCH will likely be converted to an Advisory or Warning today– impacts beginning after midnight, Thursday night through Saturday
 - Prolonged period (72 hours) of sub-freezing temperatures expected through Monday
- Quick shot of wintry precipitation – mainly northwest and far north GA late Thursday night into Friday morning
 - Rain is expected to quickly change to snow before ending
 - Any accumulations expected to be less than 1 inch at this time
 - Watch for patchy black ice/flash freeze as colder air moves in

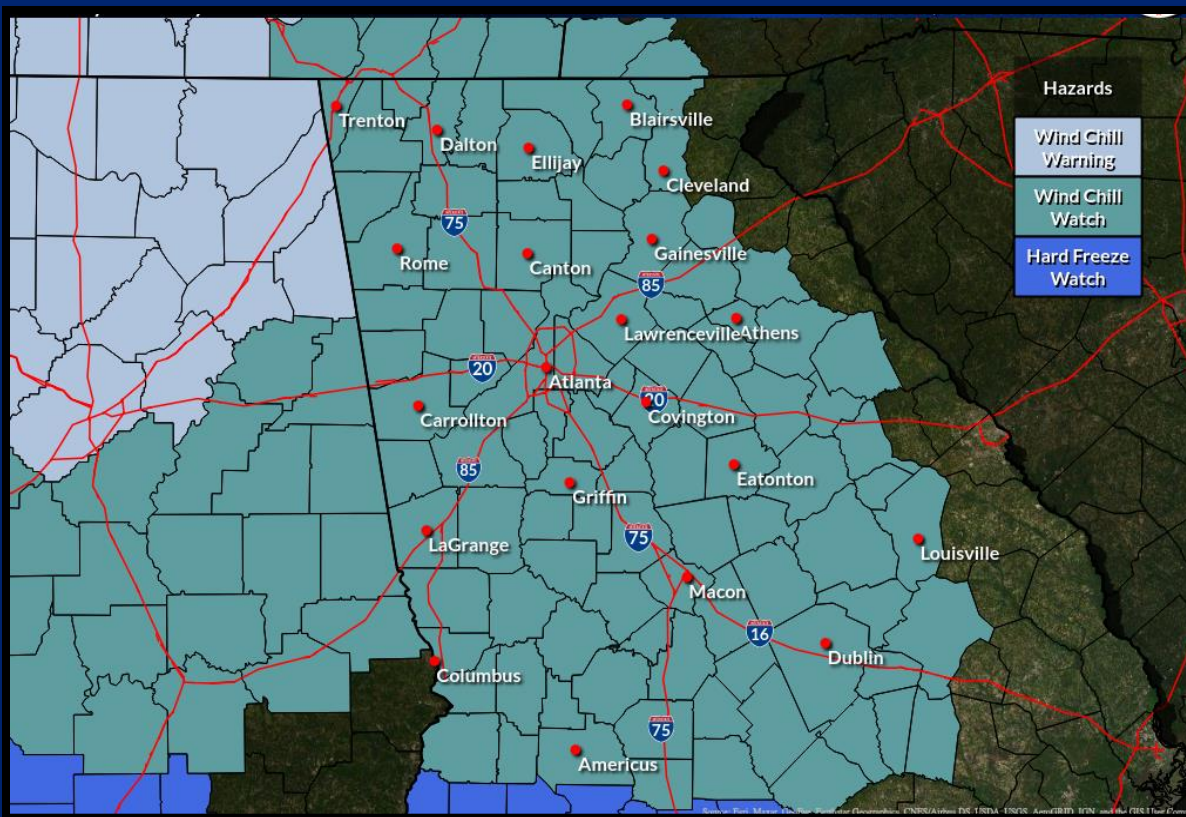
A little historical perspective



- **Since 2000**, in Atlanta, the temperature has been at or below 12 degrees only 8 times – the last time being January 2015.
- In Athens, the temperature has been at or below 12 degrees only 6 times – the last time being January 2018.
- In Macon, the temperature has been at or below 15 degrees only 7 times – the last time being January 2015.
- In Columbus, the temperature has been at or below 15 degrees only 4 times – the last time being January 2015.



Wind Chill Watch/Warnings Early Friday -> Saturday



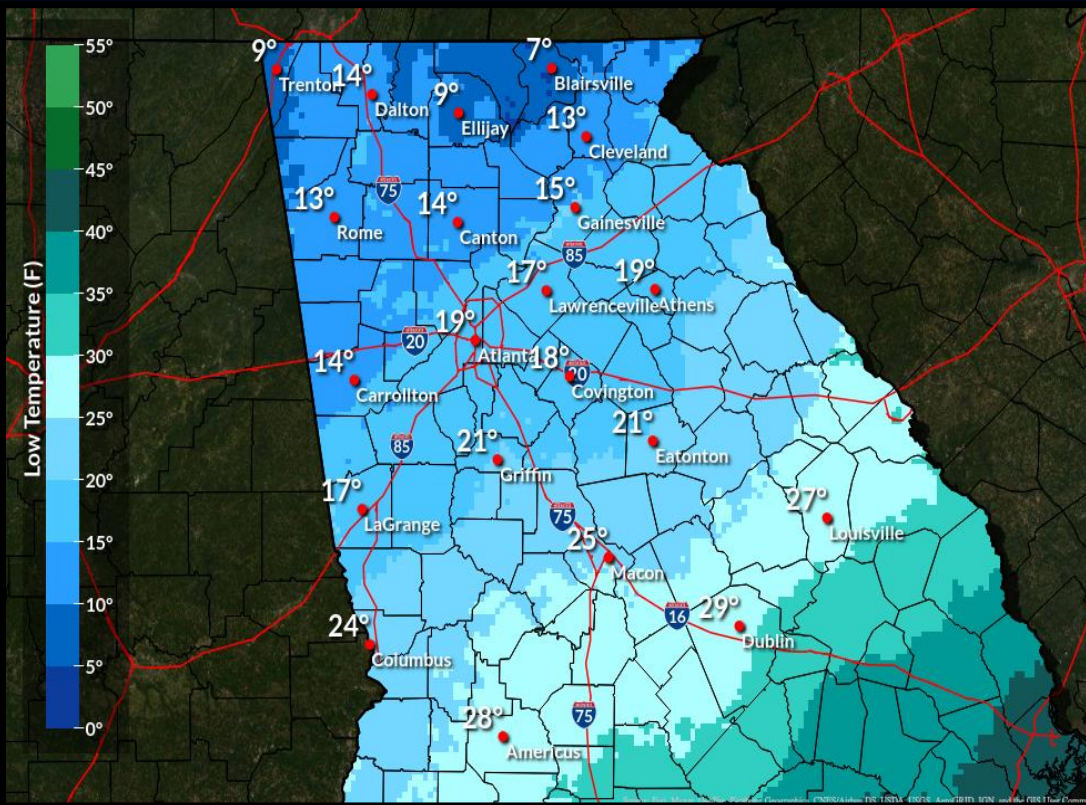
- Temperatures sharply falling after midnight through mid morning Friday
- Wind Chills lowest during the day Friday/Friday Night
- **Advisory for Wind Chills: +5 to -9°F**
- **Warning for Wind Chills: -9°F and below**



Temperatures



Lows by daybreak Friday morning (Thursday night)



- Temperatures sharply falling after midnight through mid morning Friday
- Any precipitation that is falling (or has fallen) could result in rapidly developing icy conditions on roads
- South of a Columbus to Macon line, temperatures will continue to fall through the day Friday
- *Widespread sub-freezing temps by 5PM Friday*

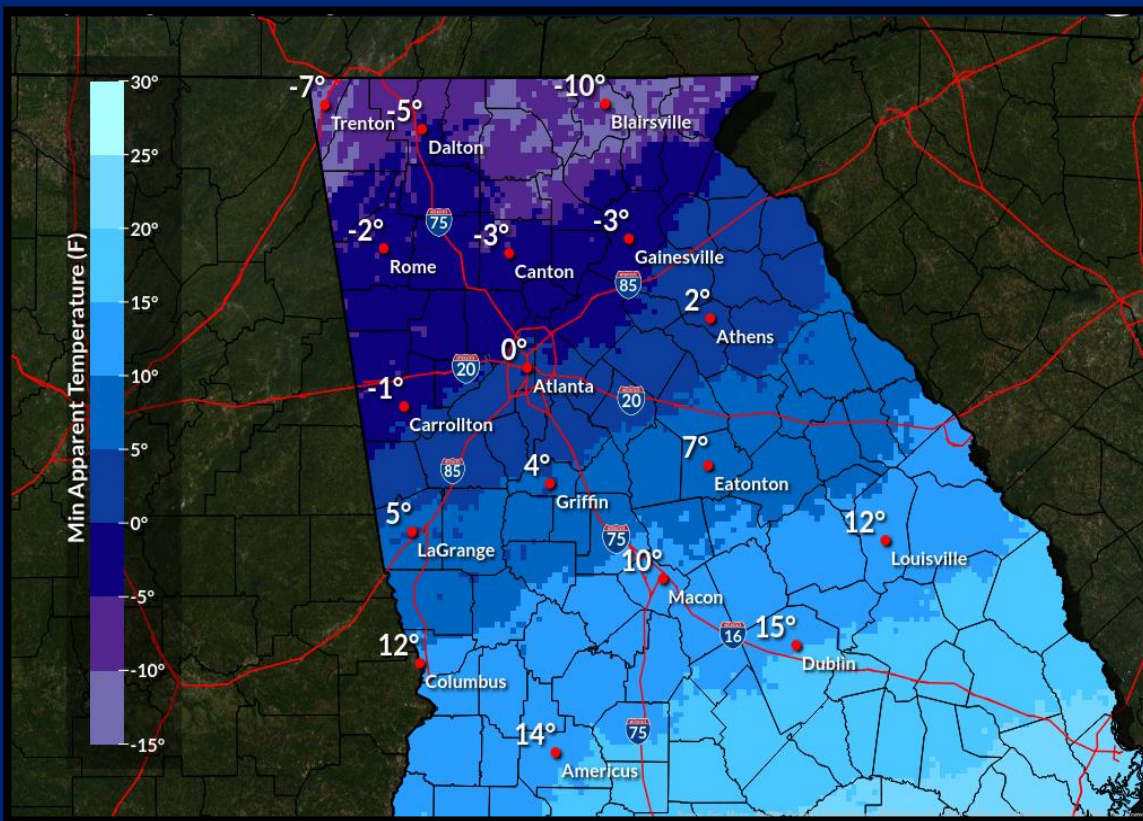


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Minimum Wind Chills

Late Thurs Night / Friday (12/23)

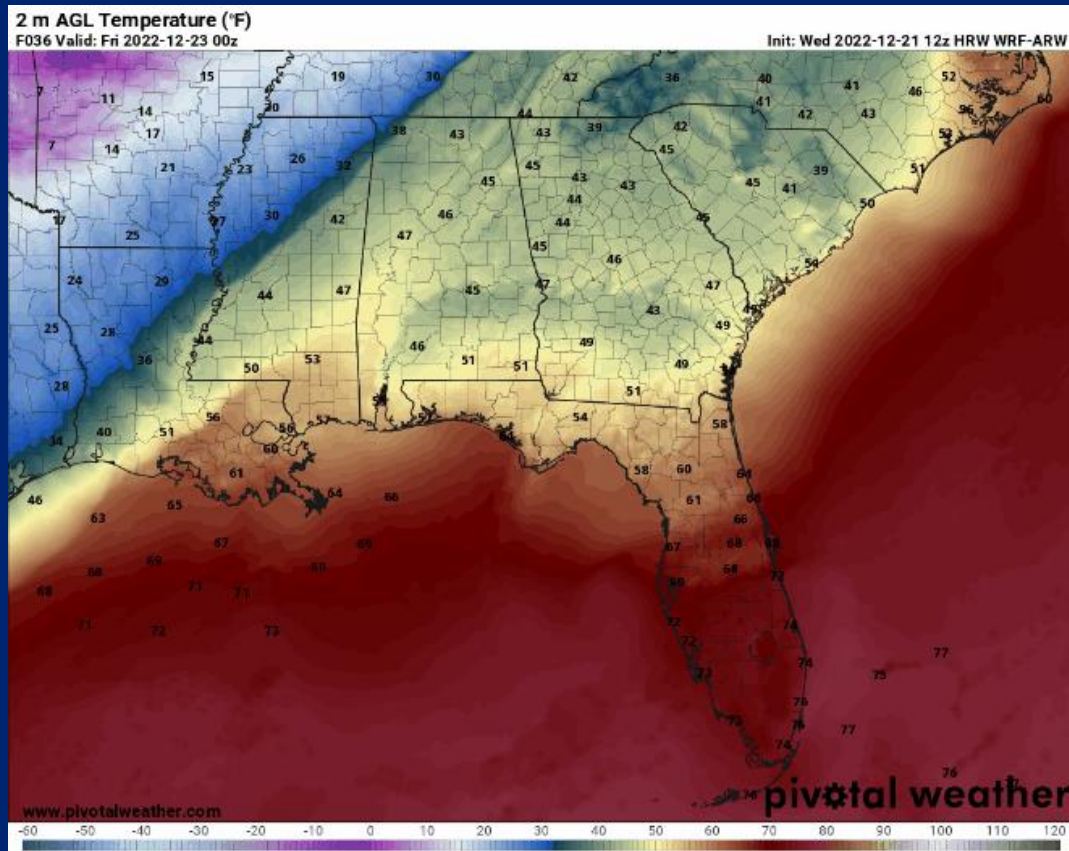


- Graphic shows Minimum Wind Chill values generated from a combination of max wind gusts and air temps
- These values (+5 to -9°F) support a **WIND CHILL ADVISORY/WARNING (-9°F OR BELOW)** – likely issued this afternoon

Drastic Temperature Drop



Flash Freeze Potential (Model #1 – **ARW**)

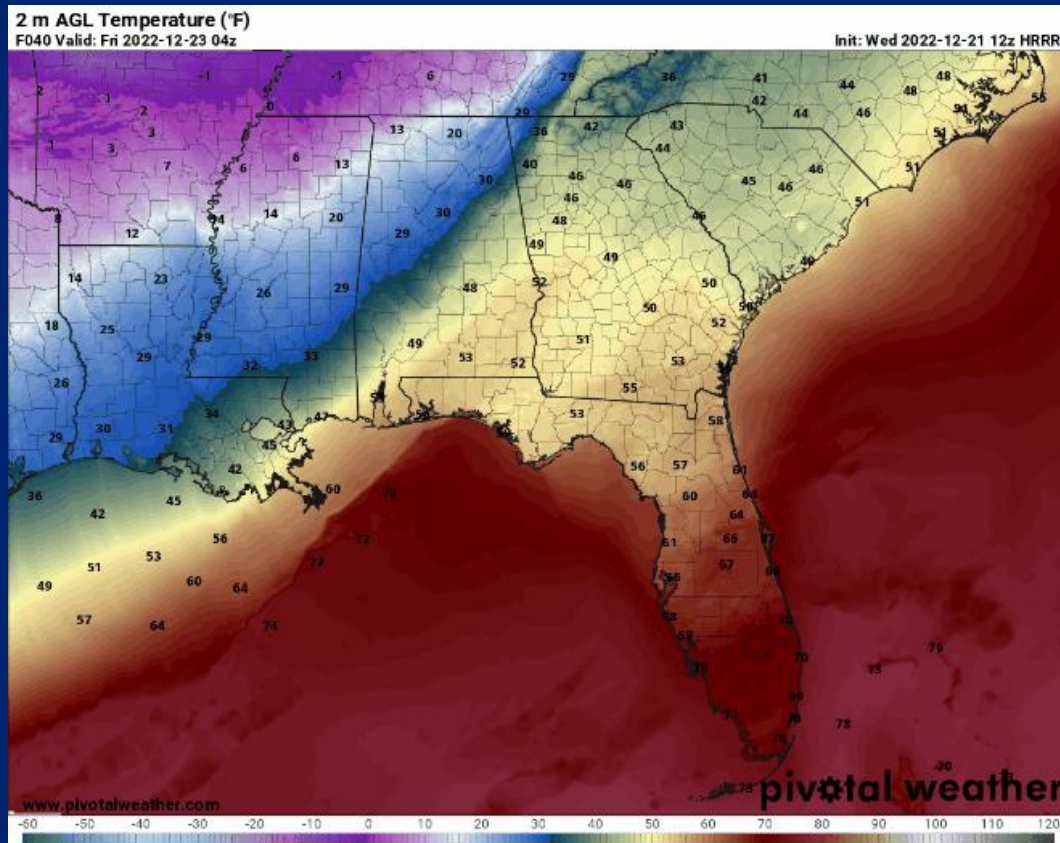


- Temperatures sharply falling after midnight through mid morning Friday
- Models indicating as much as a 30+ degree drop over ~ 5/6 hour period
- Any residual moisture would freeze quickly ...**much of it will dry out with wind and dry air**
- Any falling precip would likely stick (very little expected)

Drastic Temperature Drop



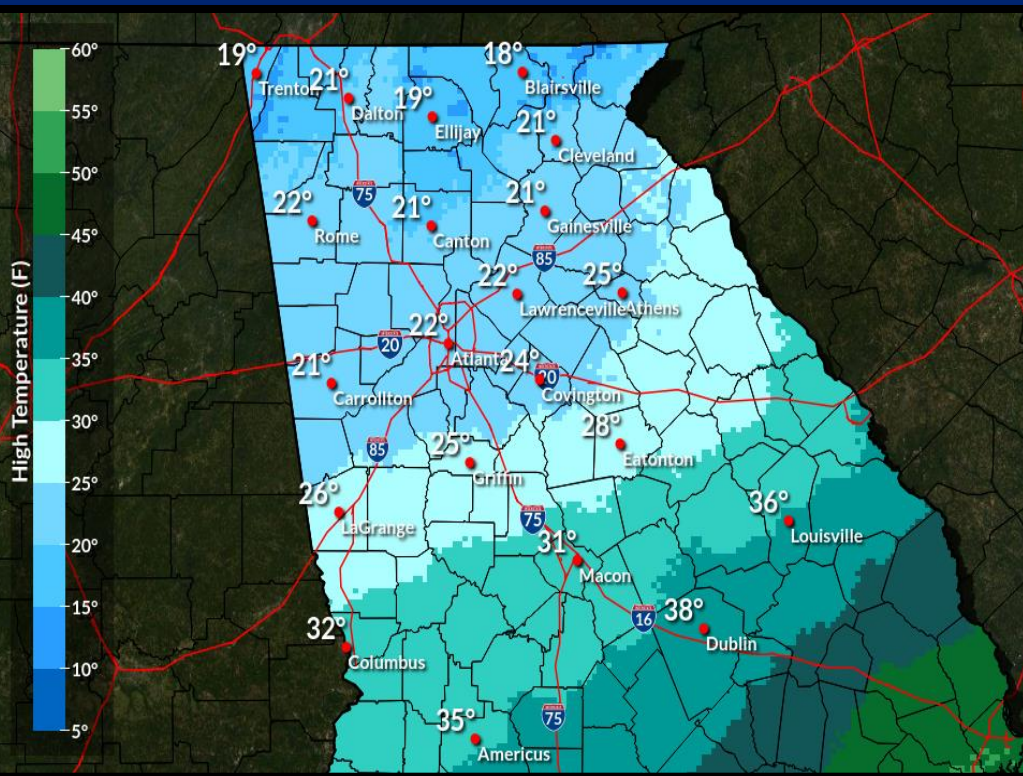
Flash Freeze Potential – Model #2 (HRRR)



- Temperatures sharply falling after midnight through mid morning Friday
- Models indicating as much as a 30+ degree drop over ~ 5/6 hour period
- Any residual moisture would freeze quickly ...**much of it will dry out with wind and dry air**
- Any falling precip would likely stick (very little expected)

Max Temperatures

Highs Friday PM



- Many areas will see highs for the day around Midnight (Thursday Night)
- Temps falling through the day and remaining steady during the peak sunlight hours (afternoon)
- *Widespread sub-freezing temps by 5PM Friday*



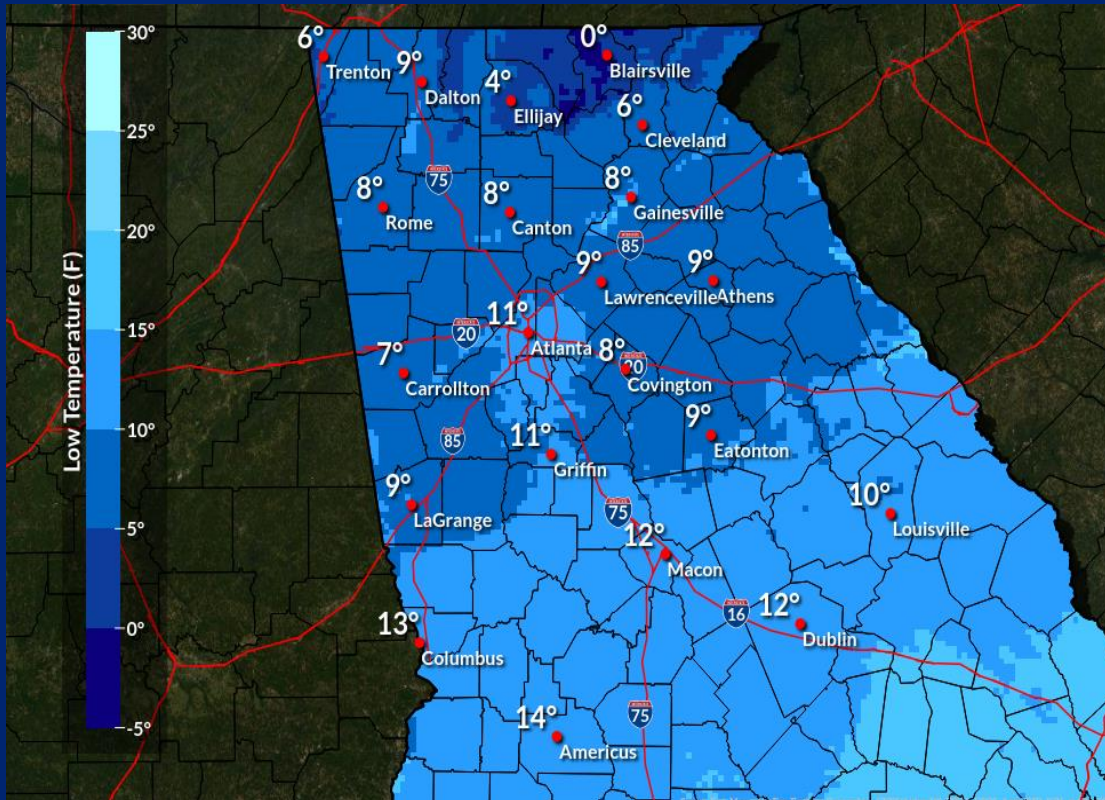
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Temperatures



Lows by daybreak Saturday morning (Friday night)



- Temperatures sharply falling after midnight through mid morning Friday
- Any precipitation that is falling (or has fallen) could result in rapidly developing icy conditions on roads
- South of a Columbus to Macon line, temperatures will continue to fall through the day Friday
- ***Temps could be colder***

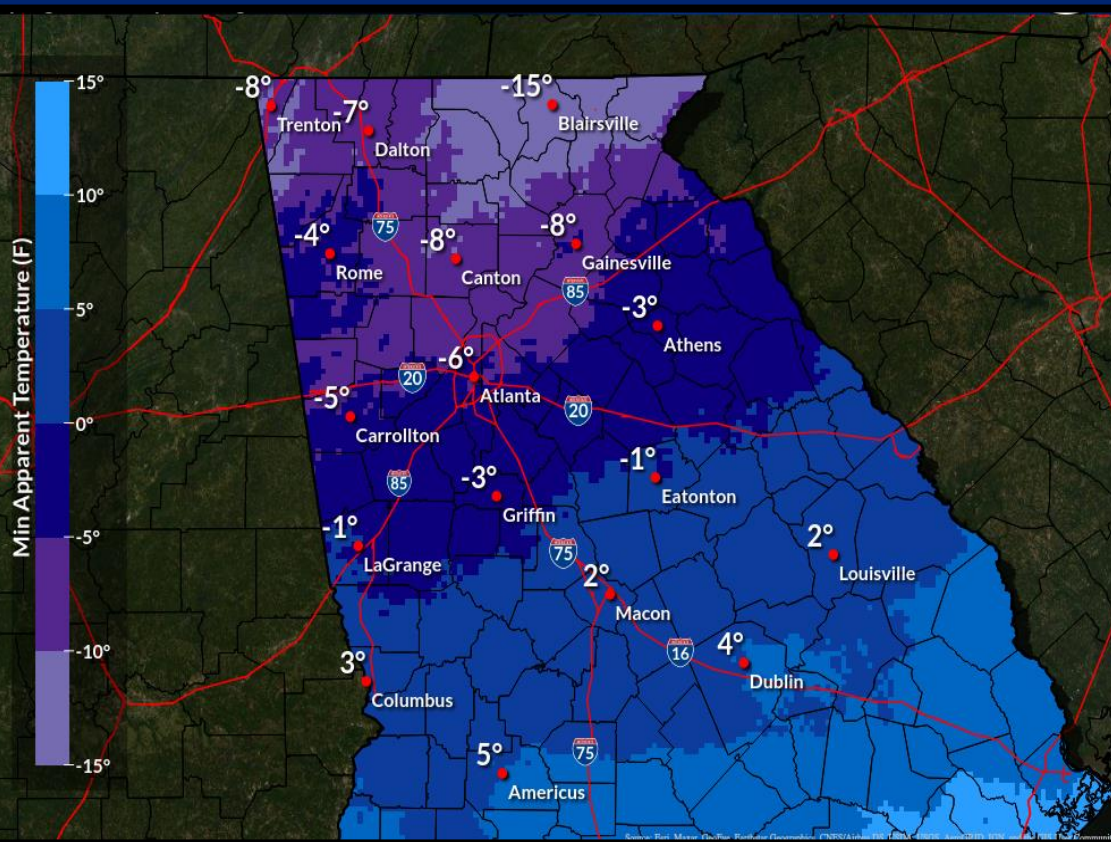


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Minimum Wind Chills

Late Friday Night / Saturday (12/24)



- Graphic shows Minimum Wind Chill values generated from a combination of max wind gusts and air temps
- These values (+5 to -9°F) support a **WIND CHILL ADVISORY/WARNING (-9°F OR BELOW)** – likely issued this afternoon



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Temperature Range

Based on Model spreads – Saturday 12/24 AM



Saturday, December 24, 2022

Low Temperature Range Forecast

80% of the time the low temperature will fall between the given range. A wider range represents less certainty in the forecast, which can be caused by varying cloud cover, a passing front or other related weather conditions.

Location

Range Forecast } Best Forecast

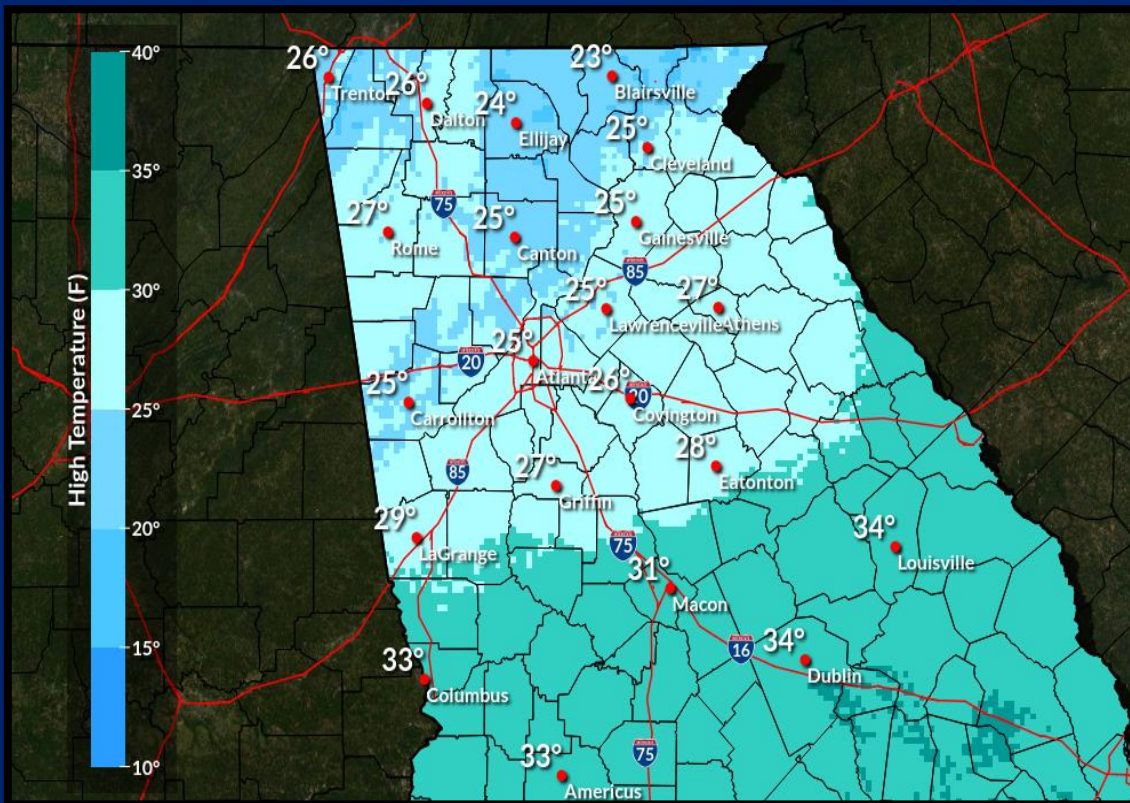


Issued: Wed, Dec 21, 2022, 9 AM



Max Temperatures

Highs Saturday PM



- ****RECORD** low Max temps in the forecast for Saturday
- Winds will begin to diminish through the day but wind chills will still be in the single digits to low teens



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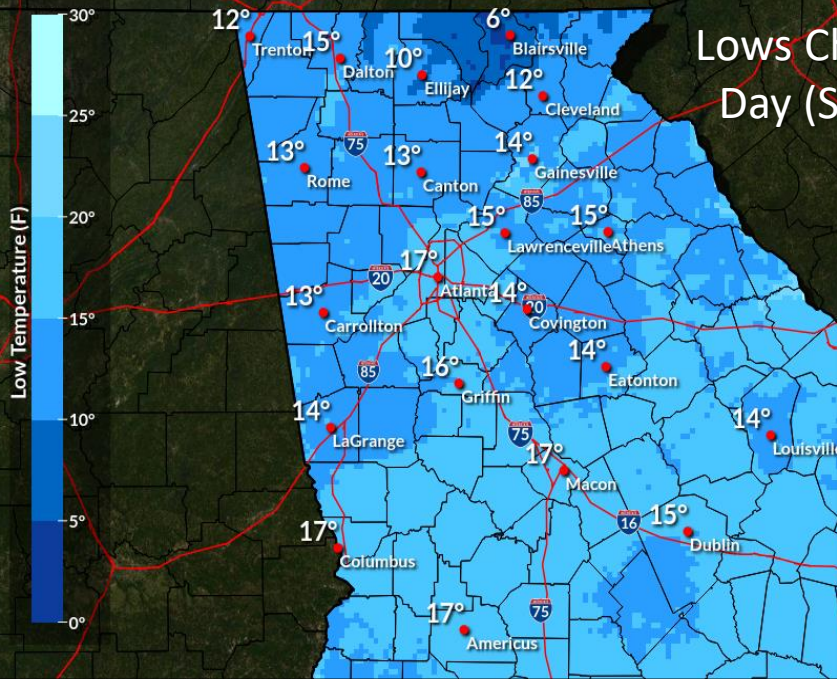


Cold continues into Christmas Day

Lows Saturday night/Sunday morning (12/24-25)

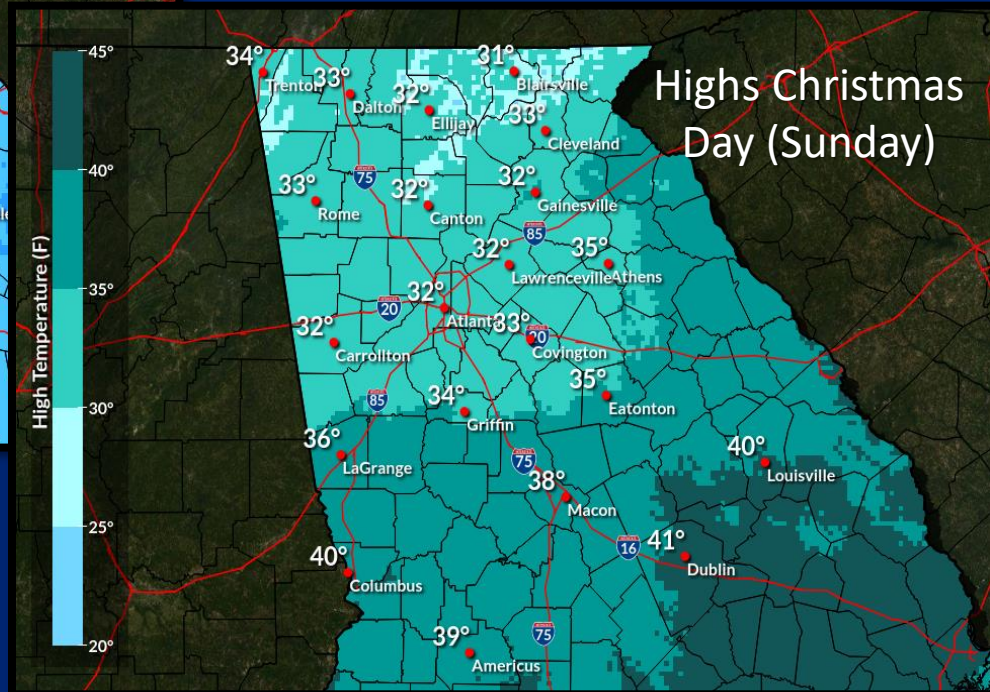


Lows Christmas Day (Sunday)



- Prolonged period of sub-freezing temperatures
- Gusty winds will make it feel 5-10 degrees colder

Highs Christmas Day (Sunday)

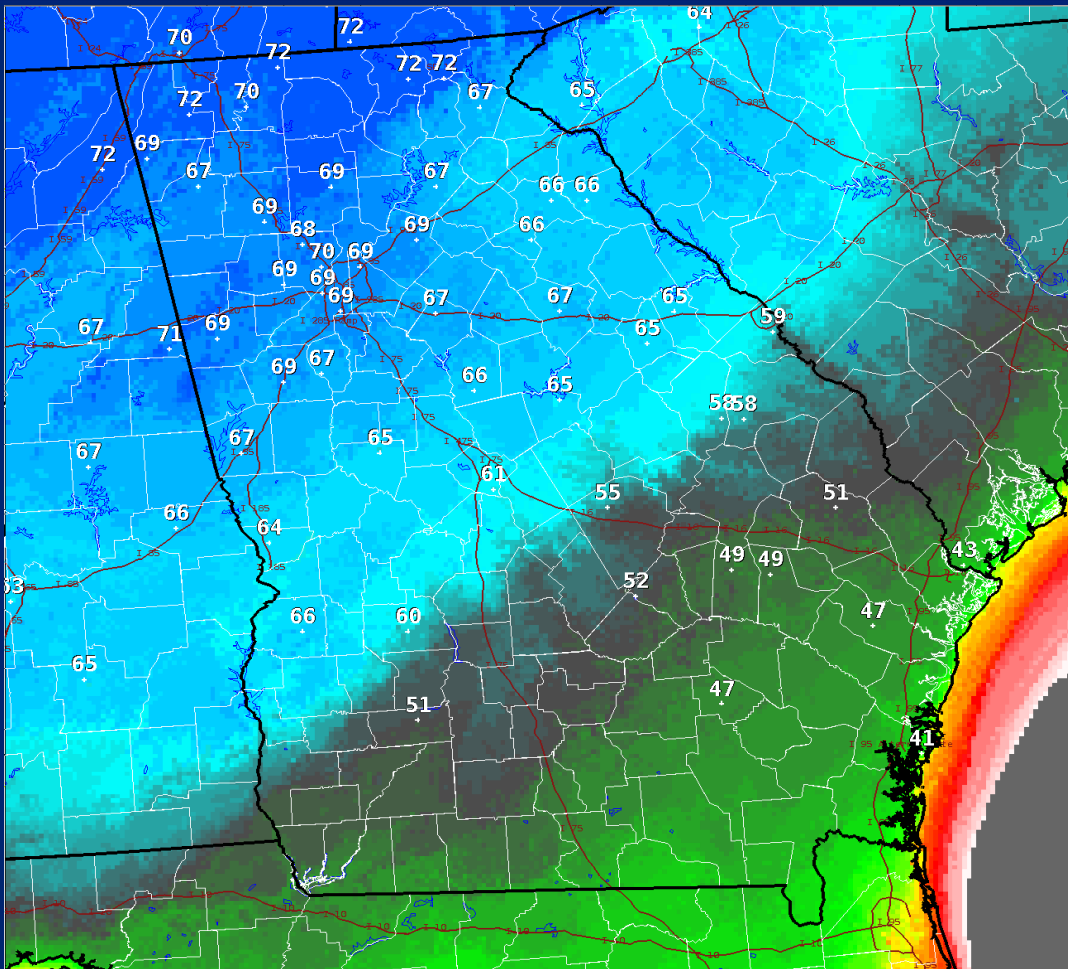


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Total Hours Below Freezing

7 AM Friday – 7 AM Monday (Max 72 hours)



- Graphic shows the number of hours in our forecast below 32 degrees from Friday to Monday
- Prolonged period of subfreezing temperatures
- Could increase in the I-20 corridor as newer guidance coming in colder for Sunday highs



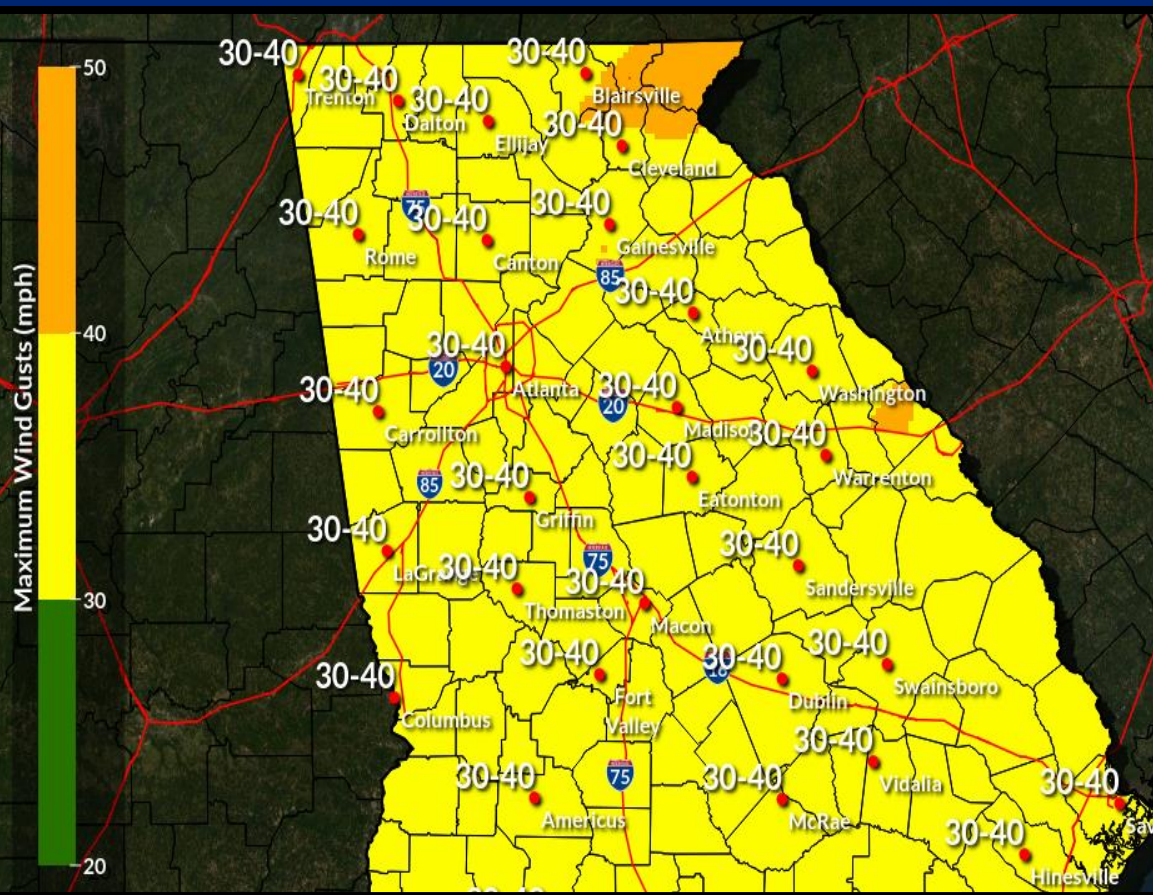
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Strong Winds



Behind the Cold Front... late Thursday night through Friday afternoon



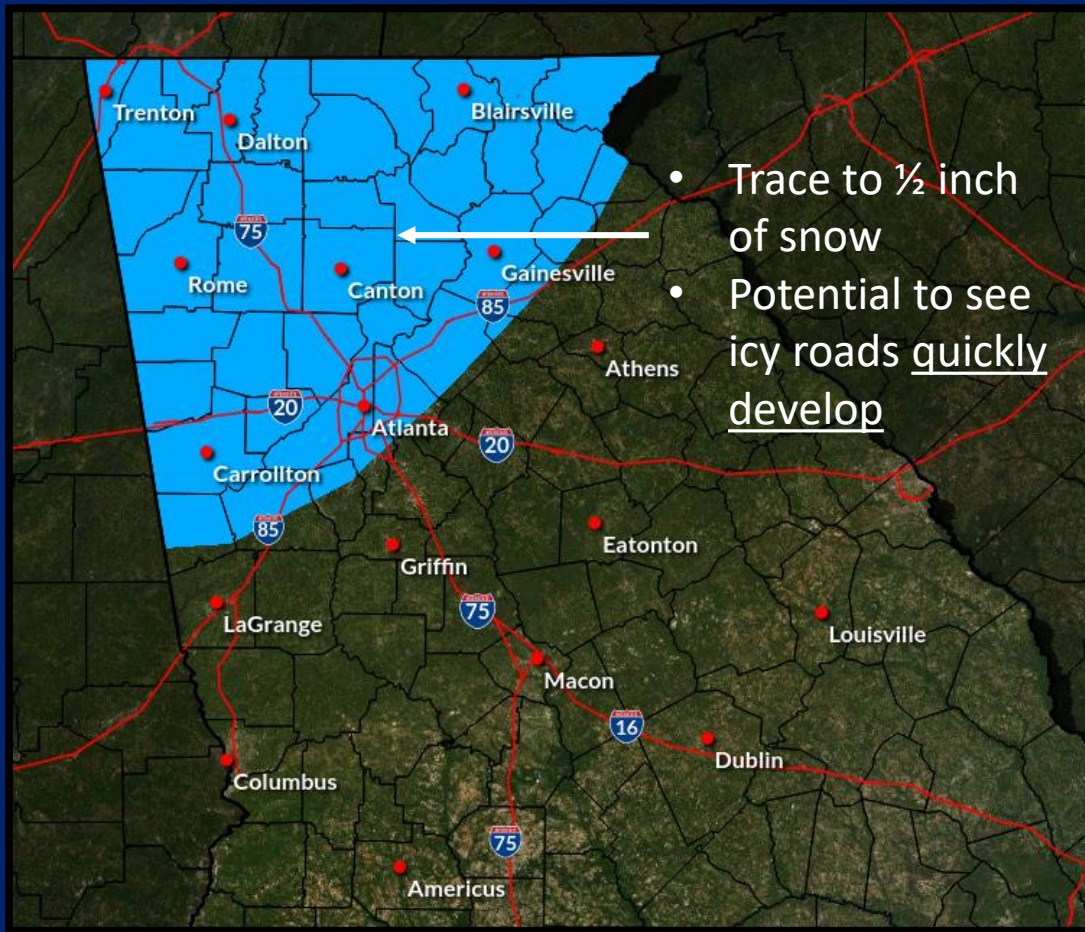
- Expected peak wind (gusts) behind the cold front, late Thursday night and Friday
- NOTE: gusty winds will continue into Friday night and Saturday morning but likely come decrease with time through early Saturday
- If this holds... a **WIND ADVISORY (area-wide)** and possible HIGH WIND WARNING (across NE GA)



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Rain → Snow

Late Thursday night – Friday morning



- Trace to $\frac{1}{2}$ inch of snow
- Potential to see icy roads quickly develop

- Rain will quickly change to snow across west-central and north GA late Thursday night into Friday morning
- **Areas in BLUE** have best chance to see minor snow accumulations – generally $< \frac{1}{2}$ inch
- All areas could see patchy BLACK ICE due to temps dropping rapidly into the teens and 20s by Fri AM



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Official Snow Forecast

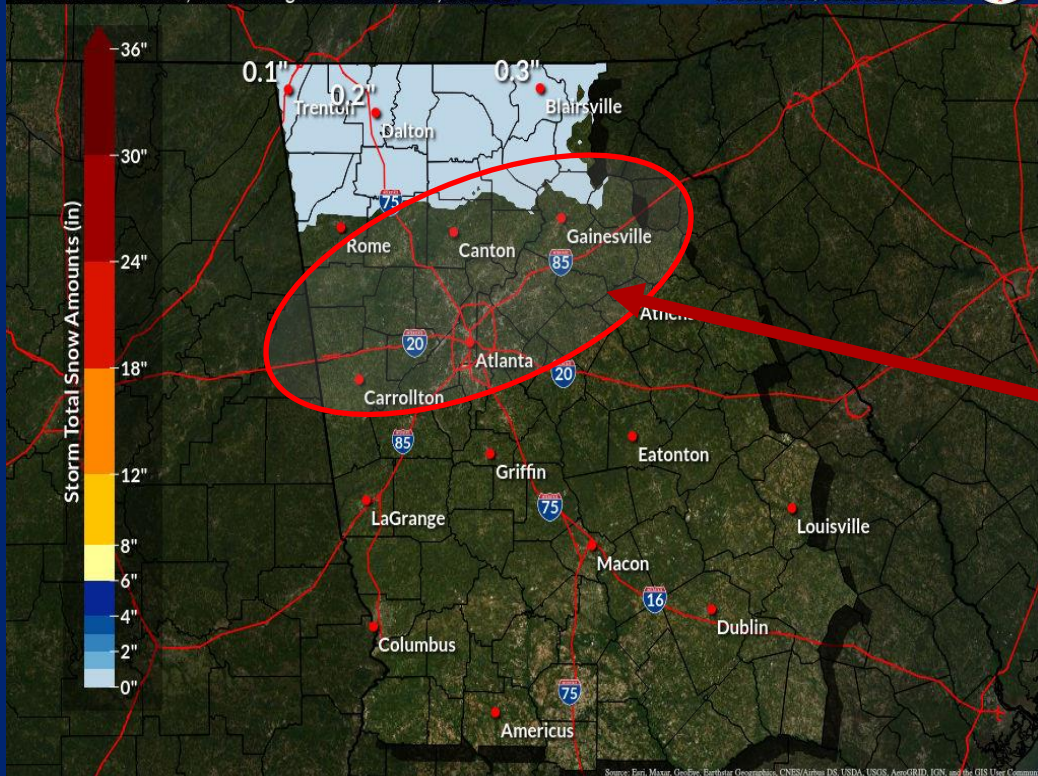


Expected Snowfall - Official NWS Forecast

Valid 1 AM Fri Dec 23, 2022 through 1 PM Fri Dec 23, 2022 EST

Weather Forecast Office
Atlanta, GA

Issued Dec 21, 2022 5:12 AM EST



Source: Esri, Mapbox, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

weather.gov/ffc

- Light Snow accumulations across northern GA
 - *Given the very cold temps, could be some travel issues even though amounts are light*
- *Light snow flurries or a snow shower is possible as the front moves in before daybreak Friday*

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Cold Weather Impacts



Warning Signs of Hypothermia



Confusion



Shivering



Difficulty
Speaking



Sleepiness



Stiff
Muscles

weather.gov/cold



- Exposed water lines/pipes at risk for freezing/bursting
 - *Signs -> Low water pressure*
- *Outside pets should be cared for*
- Risk of hypothermia for anyone not dressed to protect against the cold



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Summary



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